

STREET TREE NOTES

- STREET TREE FABRICATION
 - RESORT ROAD
 - 2373 LF OF RIGHT-OF-WAY
 - 59 STREET TREES REQUIRED (40' APART)
 - 59 ACER RUBRUM/RED MAPLE PROPOSED
 - LEHIGHS WAY
 - 1109 LF OF RIGHT-OF-WAY
 - 28 STREET TREES REQUIRED (40' APART)
 - 28 ACER RUBRUM/RED MAPLE PROPOSED
- THE DEVELOPER WILL BE RESPONSIBLE FOR THE PROPOSED STREET TREES AT THE TIME OF CONSTRUCTION OF RESORT ROAD AND LEHIGHS WAY.

STREET TREE SCHEDULE

BOTANICAL NAME	COMMON NAME	SIZE	ROOT	QUANTITY	SYMBOL
ACER RUBRUM	RED MAPLE	2 1/2" CAL.	B & B	83	(Symbol)

STREET LIGHT LEGEND

LEHIGHS WAY	RESORT RD	RESORT RD
STA 2+90 Q2 15'L	STA 0+100 Q2 16'L	STA 13+75 Q2 16'L

100 WATT HPS LAMP TRADITIONAL
POST TOP FIXTURE MOUNTED ON A
14 FOOT BLACK FERROUS POLE

STREET LIGHT SHALL BE PLACED
2'-4" FROM BACK
OF CURB

TREE PLANTING DETAIL

MEDIUM TREES - 2-1/2" CALIPER OR LARGER
NOT TO SCALE
FOR PLANTING DESIGN SEE DETAIL SHEET 2 OF 7

APPROVED:
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Charles M. Decker 12-24-96
CHIEF, BUREAU OF HIGHWAYS

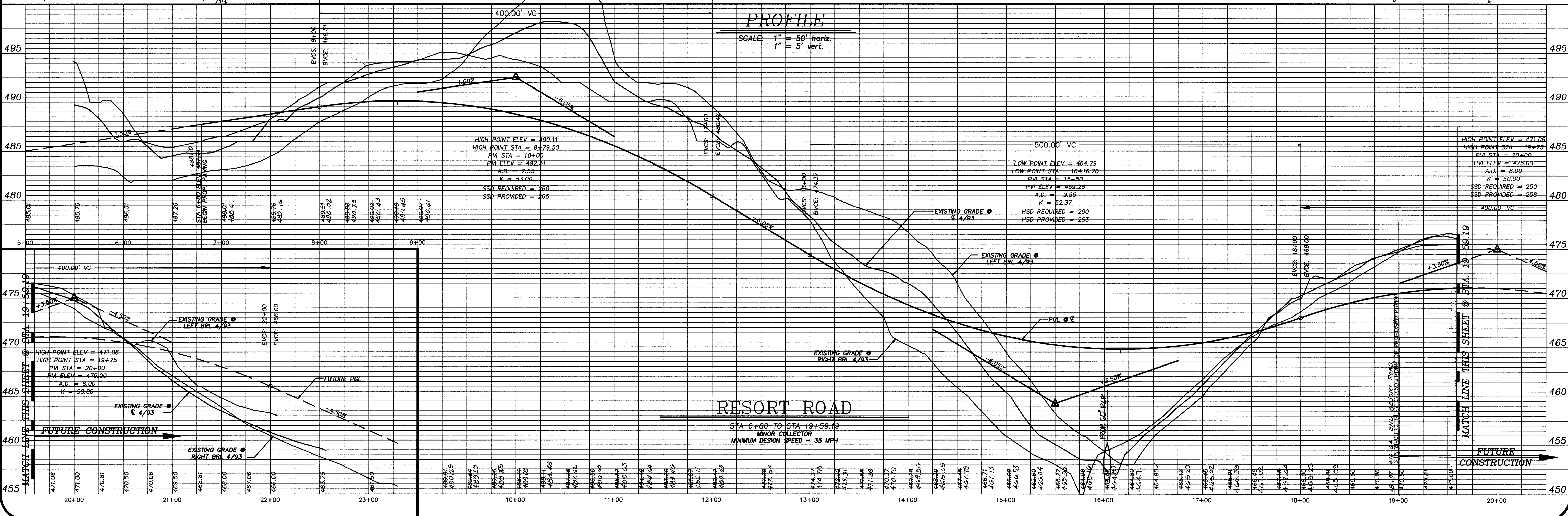
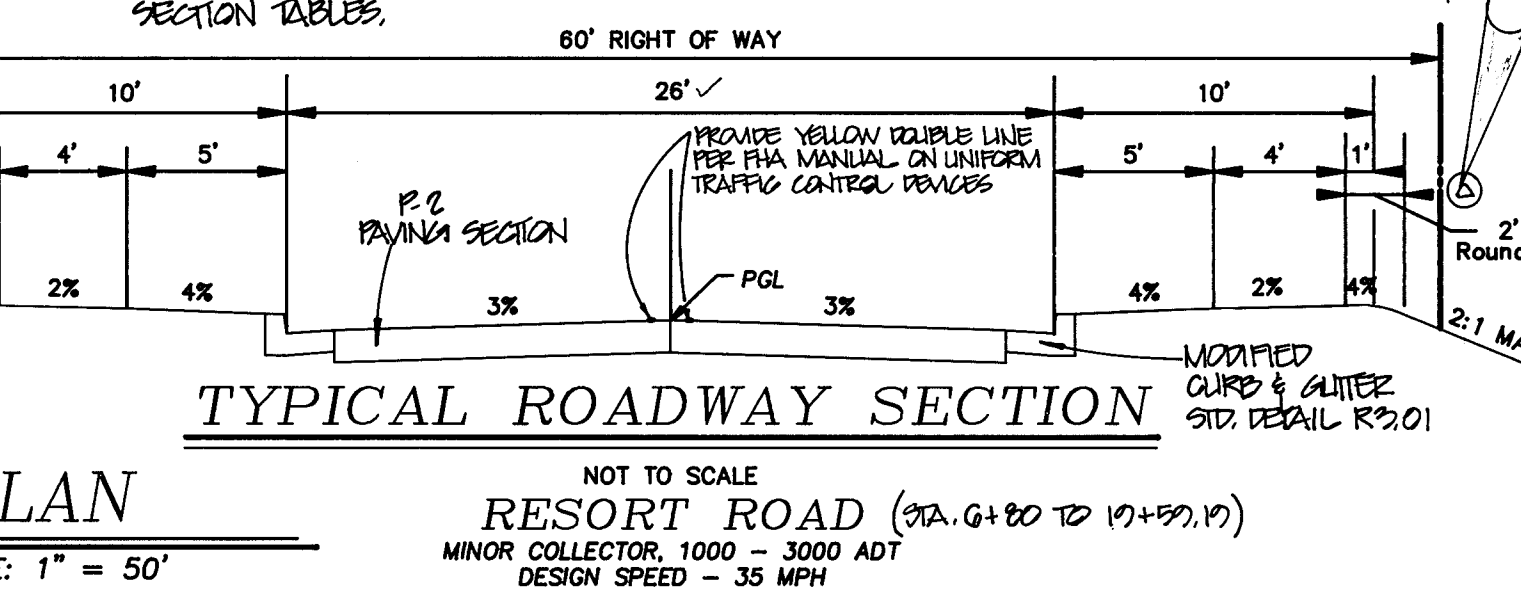
APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Richard Brown 1/3/97
CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED:
HOWARD COUNTY DEPARTMENT OF ENGINEERING

Mark Demmer 12/24/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION

- GENERAL NOTES**
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
 - THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS / BUREAU OF ENGINEERING / CONSTRUCTION INSPECTION DIVISION AT (410) 313-1800 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
 - THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
 - TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
 - STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME II (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)".
 - A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
 - THE EXISTING TOPOGRAPHY IS TAKEN FROM AN AERIAL SURVEY WITH TWO (2) FOOT CONTOUR INTERVALS PREPARED BY WINGS MARKING CO., INC. DATED APRIL 23, 1992.
 - SURVEY CONTROL IS BASED ON NAD '83 MARYLAND COORDINATE SYSTEM AS PROVIDED BY HOWARD COUNTY GEODETIC CONTROL STATIONS:
 - 3440001 N534733.478 ELEV 488.341
 - 3440002 N533288.297 ELEV 488.341
 - 3440002 N533288.297 ELEV 488.341
 - 3440002 E837983.249 ELEV 482.306
 - WATER IS PUBLIC. (CONTRACTS #41-3550-D & 24-3549-D, LITTLE PATUXENT DRAINAGE AREA).
 - SEWER IS PUBLIC. (CONTRACT #24-3549-D, LITTLE PATUXENT DRAINAGE AREA).
 - SEE SPP 95-121 FOR ALL WORK RELATED TO THE PROPOSED REGIONAL SWM POND (APPROVED 4/22/96).
 - EXISTING UTILITIES ARE BASED ON HOWARD COUNTY CONTRACT DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONFIRM THE EXISTING UTILITIES WITHIN THE LIMITS OF CONSTRUCTION.
 - THE FLOODPLAIN STUDY FOR THIS PROJECT WAS PREPARED BY R.M. MOCH GROUP, P.C., DATED AND APPROVED ON OCTOBER 23, 1995.
 - THE WETLANDS DELINEATION STUDY FOR THIS PROJECT WAS PREPARED BY EXPLORATION RESEARCH, DATED 6/14/98 AND WAS APPROVED ON 10/23/95.
 - THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP, DATED MARCH 31, 1988 AND WAS APPROVED ON APRIL 25, 1988. IN ADDITION, A FOLLOW-UP TRAFFIC LETTER WAS PREPARED BY THE TRAFFIC GROUP DATED APRIL 20, 1995 AS SUPPORT TO SP-95-14 (APPROVED OCTOBER 23, 1995).
 - PROJECT BACKGROUND INFORMATION:
 - SUBDIVISION NAME: TURF VALLEY POD D
 - TAX MAP: 18 P/O PARCEL B
 - ELECTION DISTRICT: 2ND
 - TOTAL TRACT AREA: ACRES
 - NUMBER OF PROPOSED LOTS: 32 (BUILDABLE)
 - PRELIMINARY APPROVAL DATE: 10/23/95
 - OPZ REFERENCE NUMBER: SP-95-14
 - THIS PLAN IS IN CONFORMANCE WITH THE LATEST EDITION OF THE AMERICANS WITH DISABILITIES ACT.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT HOWARD COUNTY DESIGN MANUAL, VOLUME II.
 - THE PROPOSED WARE PIPE MUST MEET M-294 REQUIREMENTS.
 - PHASE 1 (F-90-150) AND PHASE 2 (F-90-15) OF THIS PROJECT REFER TO CONTRACTS #1 AND #2 APPROVED UNDER P-95-14 (APPROVED 10/23/95). THEY DO NOT REFER TO APPROVED TRAFFIC PHASES.
 - MDE WETLANDS PERMIT TRACKING NUMBER FOR THE CULVERT CONSTRUCTION IS 1096-66065.
 - THE HOUSE WITHIN LOT 18 SHALL BE A MINIMUM OF 2 FEET FROM THE EASEMENT LINE.
 - NOTE: MICACEOUS SOIL SUBGRADE REQUIRES THE USE OF EITHER OF THE WAPRETEC PAVE PAVEMENT SECTIONS AS SHOWN ON THE PAVEMENT SECTION TABLES.



- SHEET INDEX**
- SHT. NO.
- RESORT ROAD PLAN & PROFILE
 - LEHIGHS WAY PLAN & PROFILE
 - GRADING AND SEDIMENT CONTROL PLAN
 - GRADING AND SEDIMENT CONTROL PLAN
 - STORM DRAIN PROFILES
 - STORM DRAIN PROFILES
 - GRADING & SEDIMENT CONTROL NOTES & DETAILS

PHASE 1
TURF VALLEY PODS "D" AND P/O "E"
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND
RESORT ROAD - PLAN & PROFILE

1 OF 7

RELOCATE T. TURF VALLEY FROM P.O. TO HOPE
CHANGE STORM DRAIN FROM P.O. TO HOPE
REVISION #1 REVISED STREET LIGHTS
SUBMITTED ORIGINALS TO PDC AND SIGNED/SEALS
REVISION #2 REVISED STREET LIGHTS
1ST SUBMITTAL TO PDC

date 4/21/96
project 95016.13
illustration
drawing
scale
approval
AS SHOWN
RAM

STATE OF MARYLAND
PROFESSIONAL ENGINEER
112746

R.M. MOCH GROUP, P.C.
1300 N. Roper Road, Suite 205
Baltimore, MD 21104-1100
Tel: (410) 464-0078
Fax: (410) 720-0340

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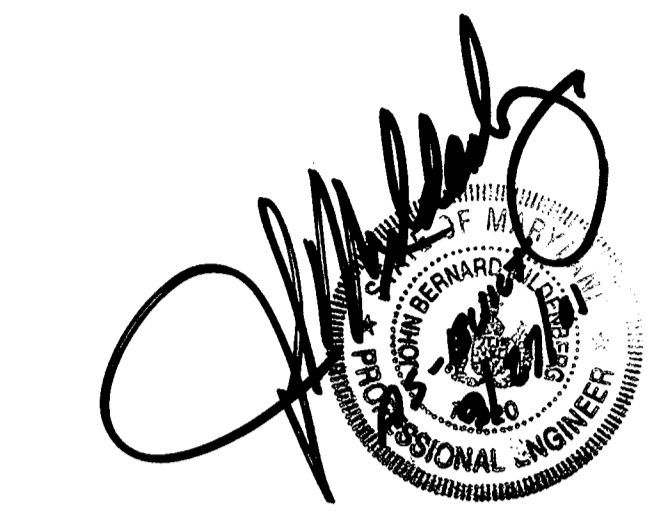
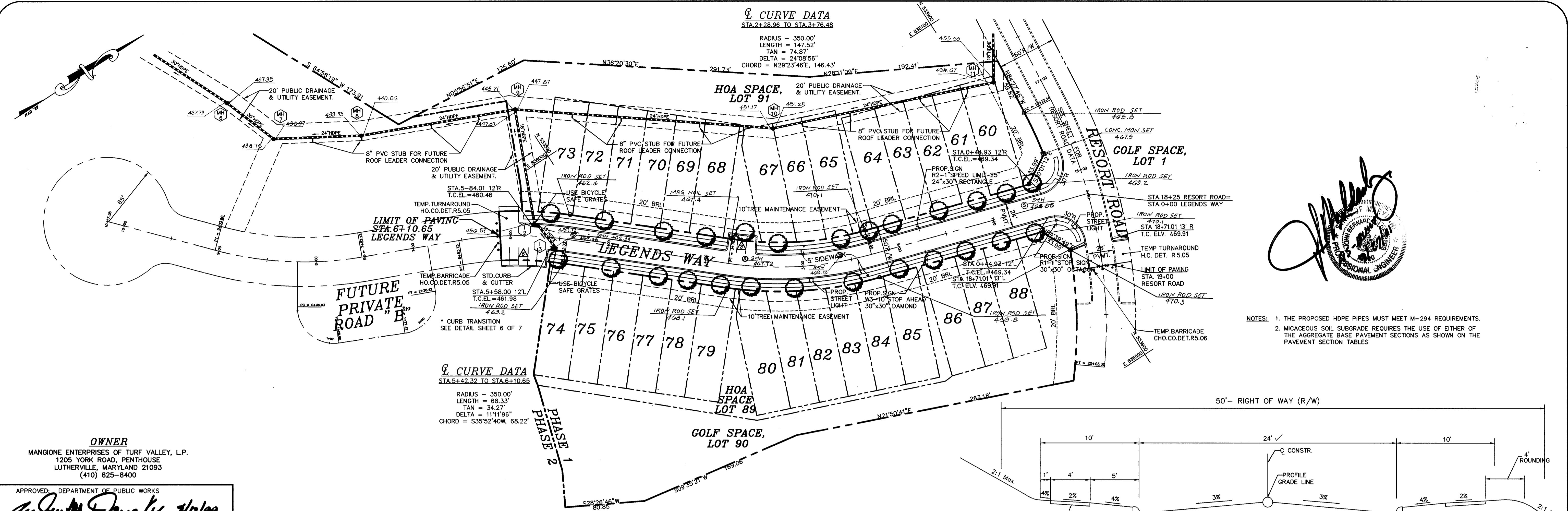
date	JULY 99
project	98076
illustration	MMP
scale	MMP
approval	AS SHOWN

date	12/22/99
description	RELOCATE TURNAROUND ON RESORT RD. REVISED LOT LAYOUT, ROAD VERT. ALIGNMENT, STORMDRAIN EASMT. AND RELOCATE 1-3.
revisions	7/17/99
no.	5

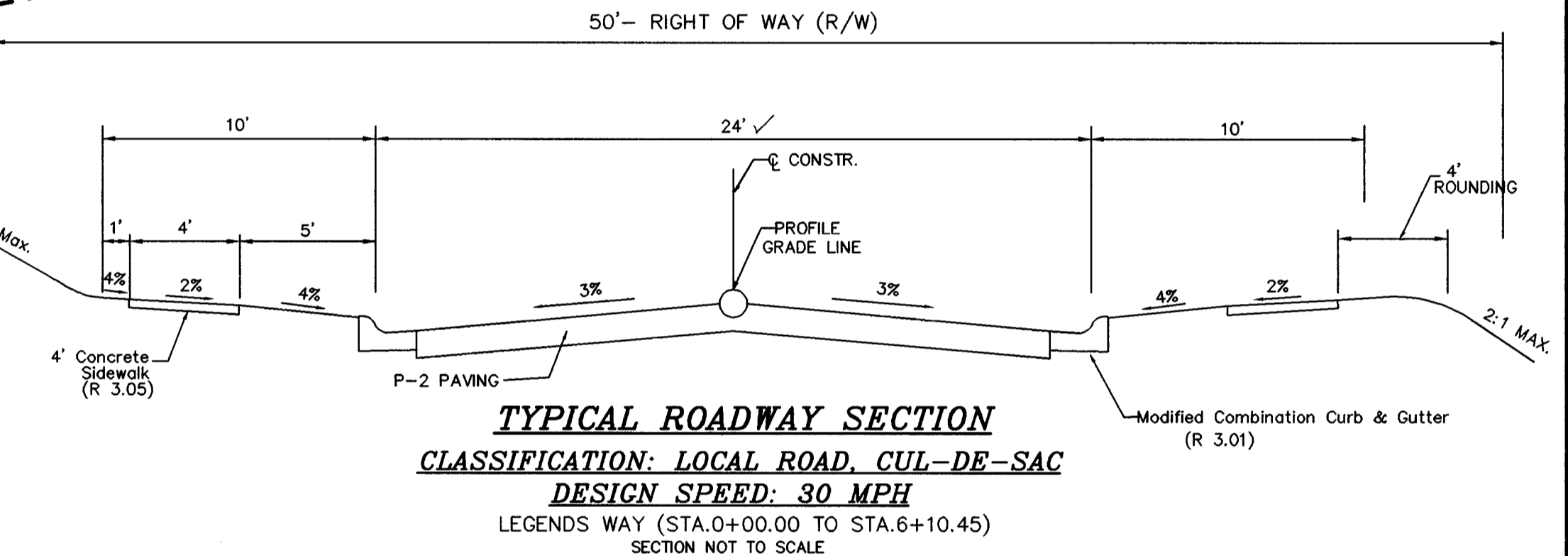
REPLACEMENT SHEET

PHASE 1
TURF VALLEY PODS "D" AND P/O "E"
HOWARD COUNTY, MARYLAND
SECOND ELECTION DISTRICT
LEGENDS WAY - PLAN AND PROFILE

MILDENBERG,
BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0236 Bldg. (301) 621-5521 Wash. (410) 997-0238 Fax.



NOTES: 1. THE PROPOSED HDPE PIPES MUST MEET M-294 REQUIREMENTS.
2. MICACEOUS SOIL SUBGRADE REQUIRES THE USE OF EITHER OF THE AGGREGATE BASE PAVEMENT SECTIONS AS SHOWN ON THE PAVEMENT SECTION TABLES

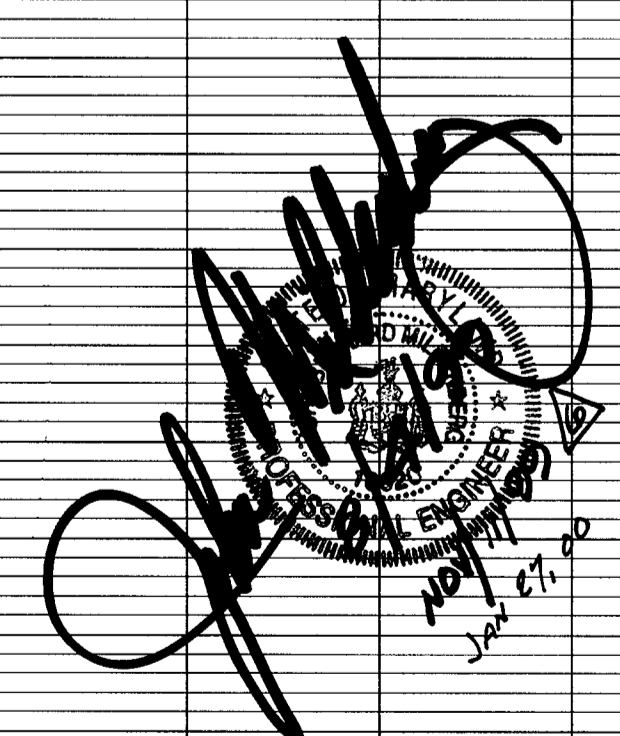
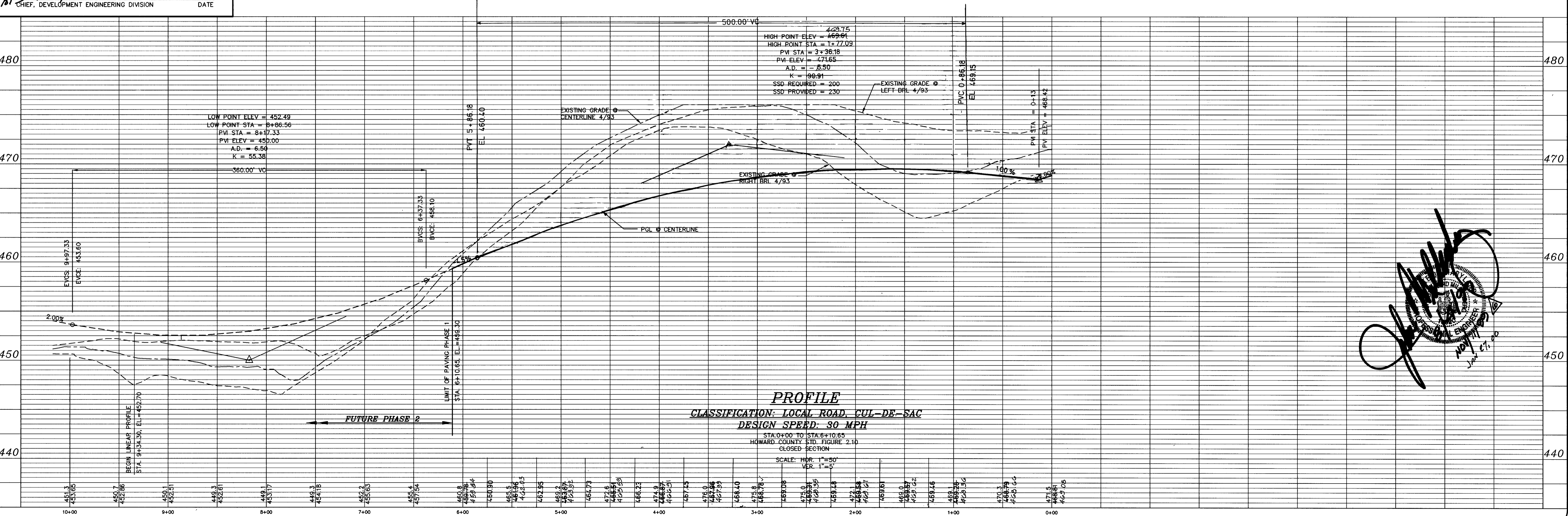


OWNER
MANGIONE ENTERPRISES OF TURF VALLEY, L.P.
1205 YORK ROAD, PENTHOUSE
LUTHERVILLE, MARYLAND 21093
(410) 825-8400

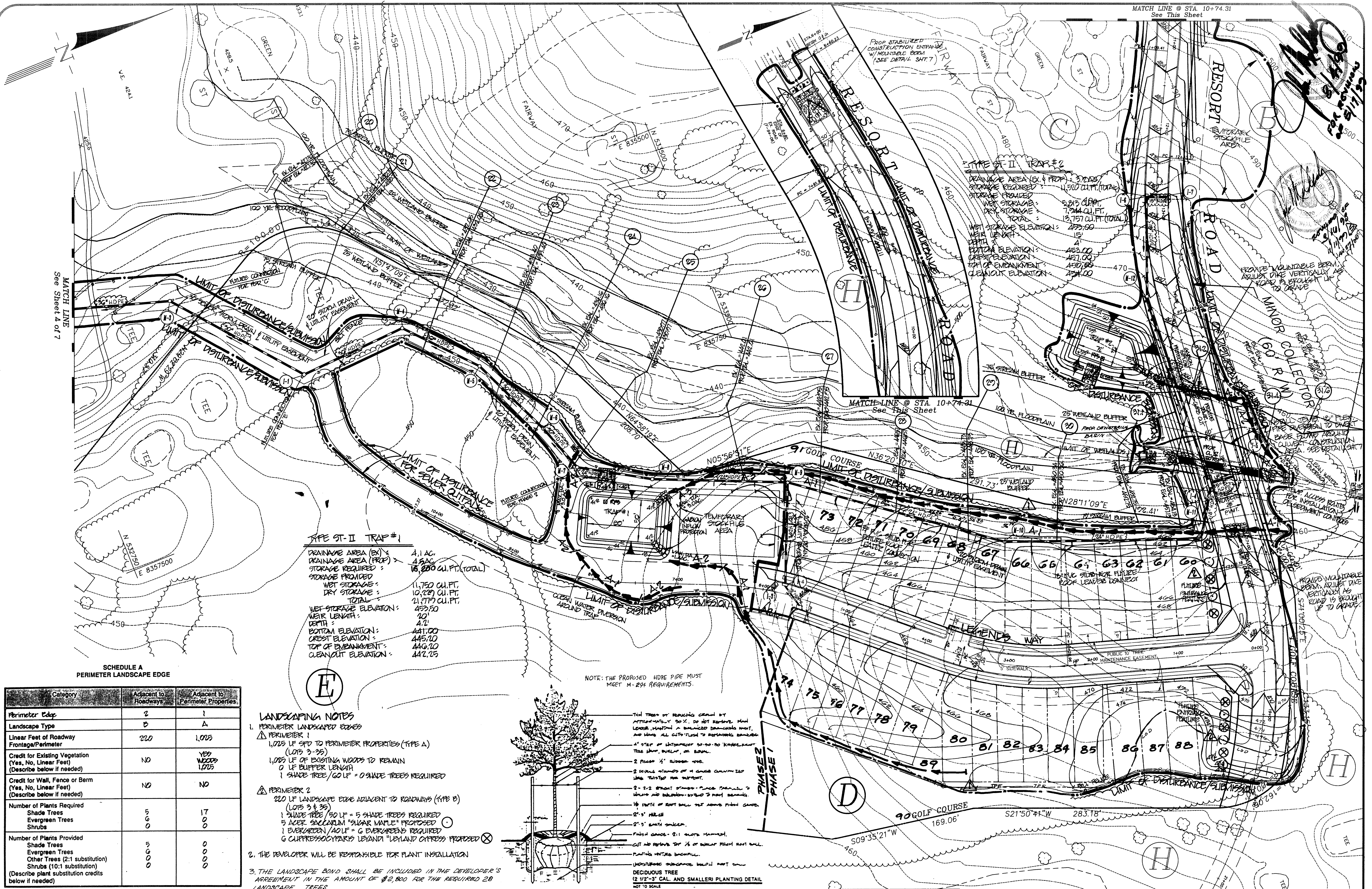
APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Daniels 7/13/99
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Wanda Hamilton 8/16/99
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Dr. Royce Egan 8/13/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



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TYPE ST-II TRAP #1

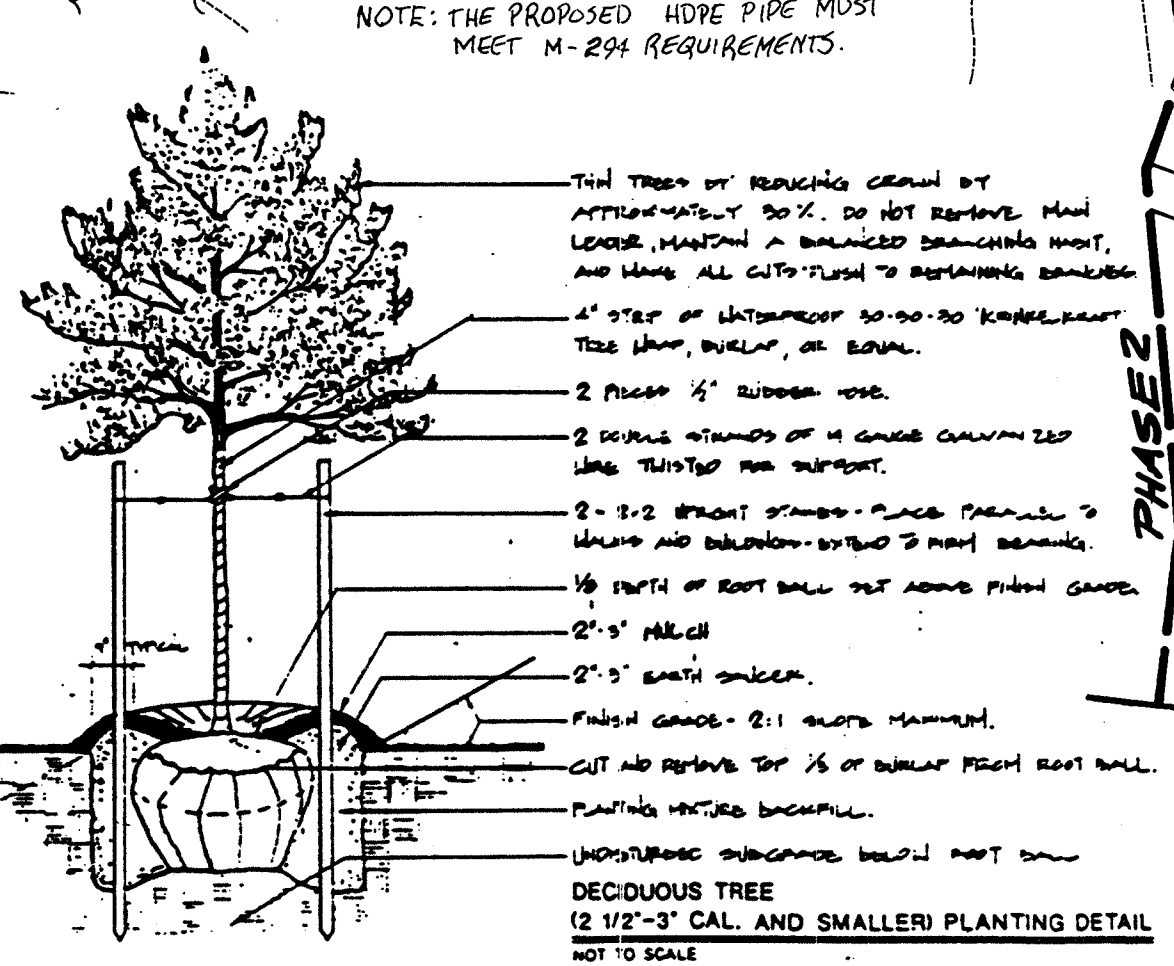
DRAINAGE AREA (EX) & DRAINAGE AREA (PROP)	4.1 AC. / 4.5 AC.
STORAGE REQUIRED	16,200 CU.FT. (TOTAL)
STORAGE PROVIDED	
WET STORAGE	11,750 CU.FT.
DRY STORAGE	10,280 CU.FT.
TOTAL	21,770 CU.FT.
WET STORAGE ELEVATION	453.50
WEIR LENGTH	40'
BOTTOM ELEVATION	441.00
CREST ELEVATION	445.10
TOP OF EMBANKMENT	446.10
CLEANOUT ELEVATION	442.25

SCHEDULE A PERIMETER LANDSCAPE EDGE

Category	Adjacent to Roadways	Adjacent to Perimeter Properties
Perimeter Edge	2	1
Landscape Type	B	A
Linear Feet of Roadway Frontage/Perimeter	220	1,025
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	NO	YES WOODS 1,025
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	NO	NO
Number of Plants Required		
Shade Trees	0	17
Evergreen Trees	0	0
Shrubs	0	0
Number of Plants Provided		
Shade Trees	0	0
Evergreen Trees	0	0
Other Trees (2:1 substitution)	0	0
Shrubs (10:1 substitution)	0	0
(Describe plant substitution credits below if needed)		

LANDSCAPING NOTES

- PERIMETER LANDSCAPED EDGES
 - PERIMETER 1: 1,025 LF ADJ TO PERIMETER PROPERTIES (TYPE A) (LOTS 3-35)
 - 1,025 LF OF EXISTING WOODS TO REMAIN
 - 0 LF BUFFER LENGTH
 - 1 SHADE TREE / 60 LF = 0 SHADE TREES REQUIRED
 - PERIMETER 2: 220 LF LANDSCAPE EDGE ADJACENT TO ROADWAYS (TYPE B) (LOTS 3 & 35)
 - 1 SHADE TREE / 60 LF = 5 SHADE TREES REQUIRED
 - 5 ACER SACCARUM / 5 ALVAR MAPLE PROPOSED
 - 1 EVERGREEN / 40 LF = 6 EVERGREENS REQUIRED
 - 6 CUPRESSOCYPRIS LEVANDI WETLAND CYPRESS PROPOSED
- THE DEVELOPER WILL BE RESPONSIBLE FOR PLANT INSTALLATION
- THE LANDSCAPE BOND SHALL BE INCLUDED IN THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$2,800 FOR THE REQUIRED 28 LANDSCAPE TREES.



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 [Signature] 12/24/96
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 12/21/96
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 [Signature] DATE

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 [Signature] DATE

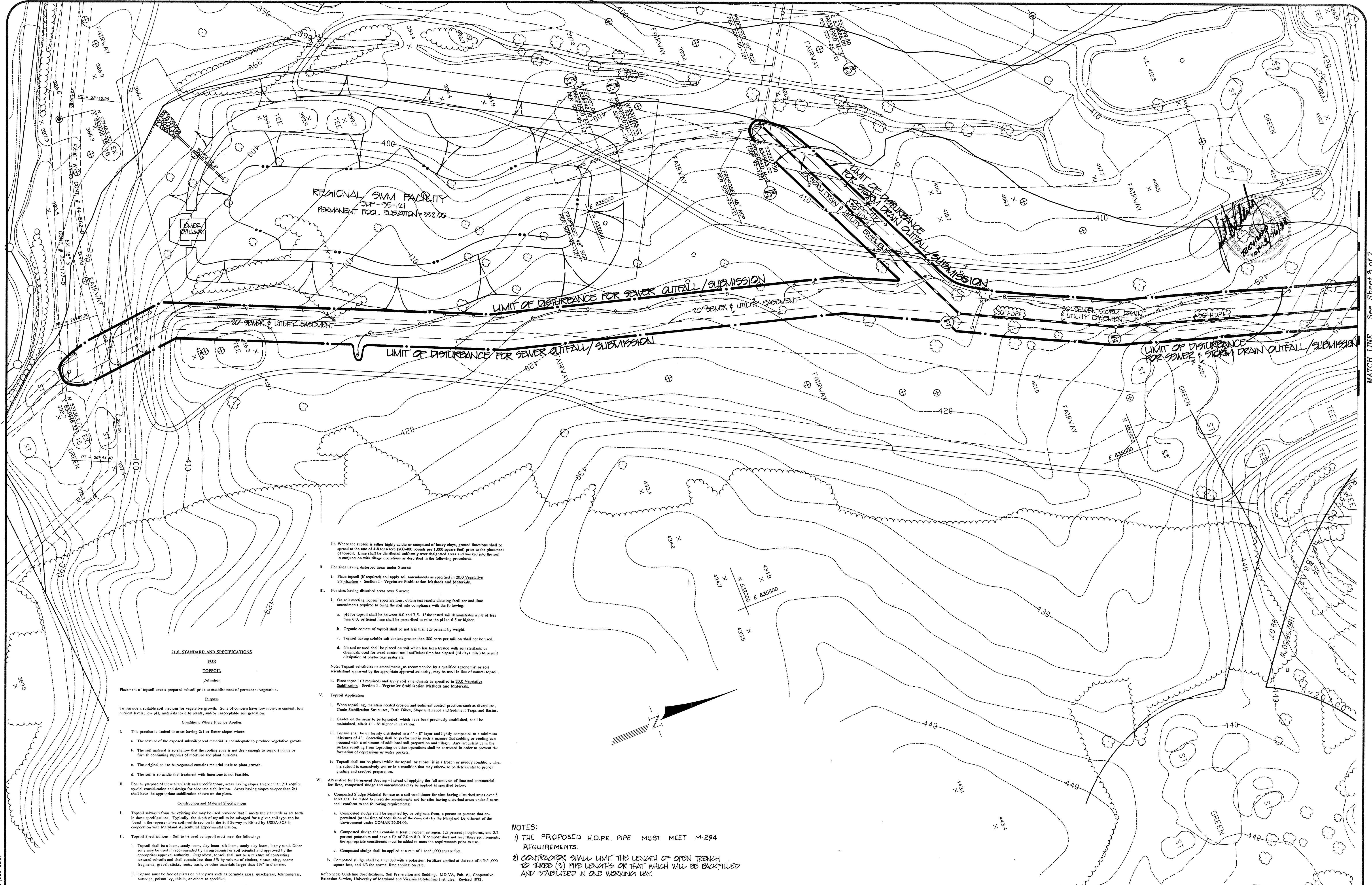
DEVELOPER'S CERTIFICATE
 I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this project will have a certificate of attendance at a Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.
 [Signature] 1/21/96
 Signature of Developer Date

ENGINEER'S CERTIFICATE
 I hereby certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard County Soil Conservation District.
 [Signature] 1/22/96
 Robert M. Mochi, P.E. Date

Project	95016.13	Date	4-17-96
Illustration	TVV	Engineering	PPF/AWZ
Scale	1" = 50'	Approval	

Revisions	1	Date	12/21/96
2	12/21/96	3	11/16/98
4	11/16/98	5	7/10/99
6	7/10/99	7	11/22/99
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11.0. STANDARD AND SPECIFICATIONS

FOR TOPSOIL

Definition
Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose
To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or susceptible soil gradation.

Conditions Where Practice Applies

- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish containing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plan.

Construction and Material Specifications

- Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experiment Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textural subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter.
 - Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutedge, poison ivy, thistle, or others as specified.

- Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
 - For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
 - For sites having disturbed areas over 5 acres:
 - On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content of topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.
 - No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.
 - Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
 - Topsoil Application
 - When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
 - Grades on the areas to be topsoiled, which have been previously established, shall be maintained, about 4" - 8" higher in elevation.
 - Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
 - Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.
 - Alternative for Permanent Sodding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:
 - Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
 - Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
 - Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a Ph of 7.0 to 8.0. If compost does not meet these requirements, the appropriate conditions must be added to meet the requirements prior to use.
 - Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
 - Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.
- Reference: Guideline Specifications, Soil Preparation and Sodding. MD-VA, Ph. D., Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institute. Revised 1973.

NOTES:

- THE PROPOSED H.D.P.E. PIPE MUST MEET M-294 REQUIREMENTS.
- CONTRACTOR SHALL LIMIT THE LENGTH OF OPEN TRENCH TO THREE (3) PIPE LENGTHS OR THAT WHICH WILL BE BACKFILLED AND STABILIZED IN ONE WORKING DAY.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Andrew M. Daniels 12/24/96
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Robert Blom 12/31/96
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED: THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U. S. SOIL CONSERVATION SERVICE DATE

DEVELOPER'S CERTIFICATE

I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this project will have a certificate of attendance at a Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.

Chris P. ... 11/21/96
 Signature of Developer Date

ENGINEER'S CERTIFICATE

I hereby certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard County Soil Conservation District.

Robert M. Mochi 1/22/98
 Robert M. Mochi, P.E. DATE

project	95016.13	date	4-18-96
illustration	TYV	engineering	PFB/MWZ
scale	1" = 50'	approval	RAM

no.	description	revisions
3	CHANGE STORM DRAIN PIPE FROM 24" TO 18" AND ADD 24" FOR STRUCTURES	9/16/98
2	ADJUST FAIRWAY TO 20' FROM STRUCTURES	1/10/98
0	1st SUBMITTAL TO HOWARD COUNTY DEP	4/10/96

PHASE I
 TURF VALLEY PODS "D" & P/O "E"
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 2
 GRADING AND SEDIMENT CONTROL PLAN

R.M. MOCHI GROUP, INC.
 1300 N. Ridge Road, Suite 215
 Ellicott City, MD 21043-1350
 (410) 461-0079
 Fax: (410) 750-6340

12-24-96 DATE

12/31/96 DATE

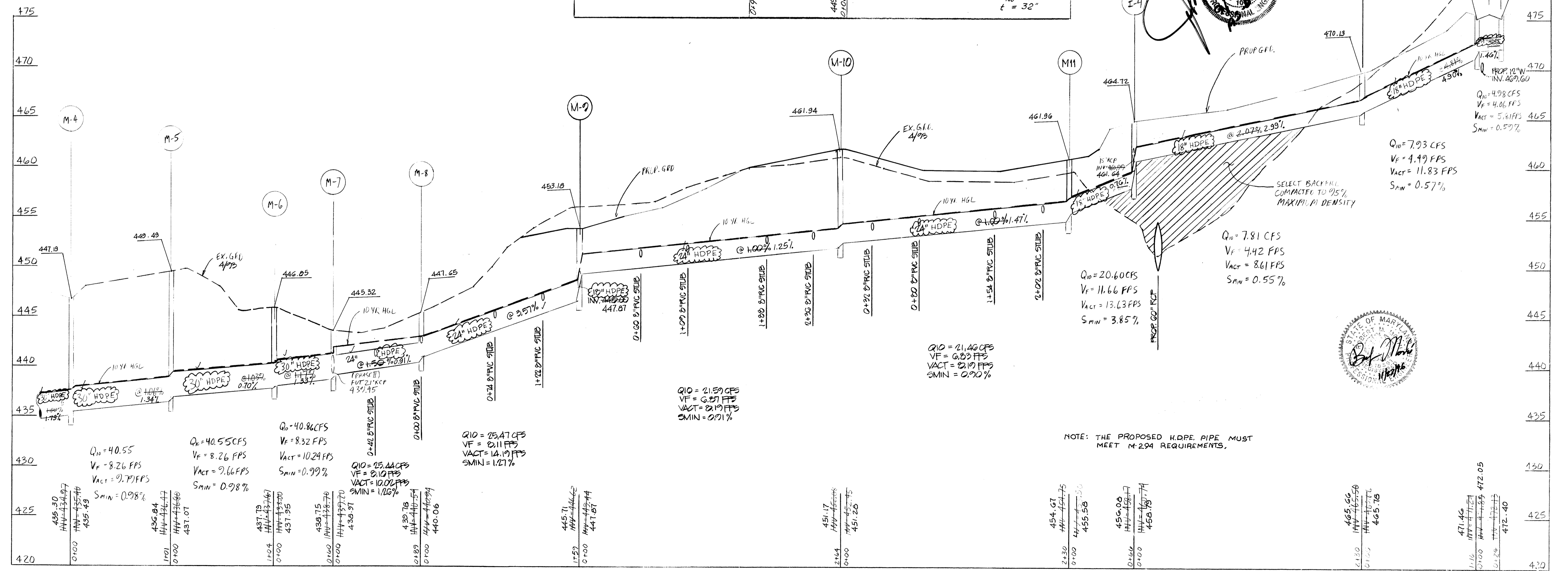
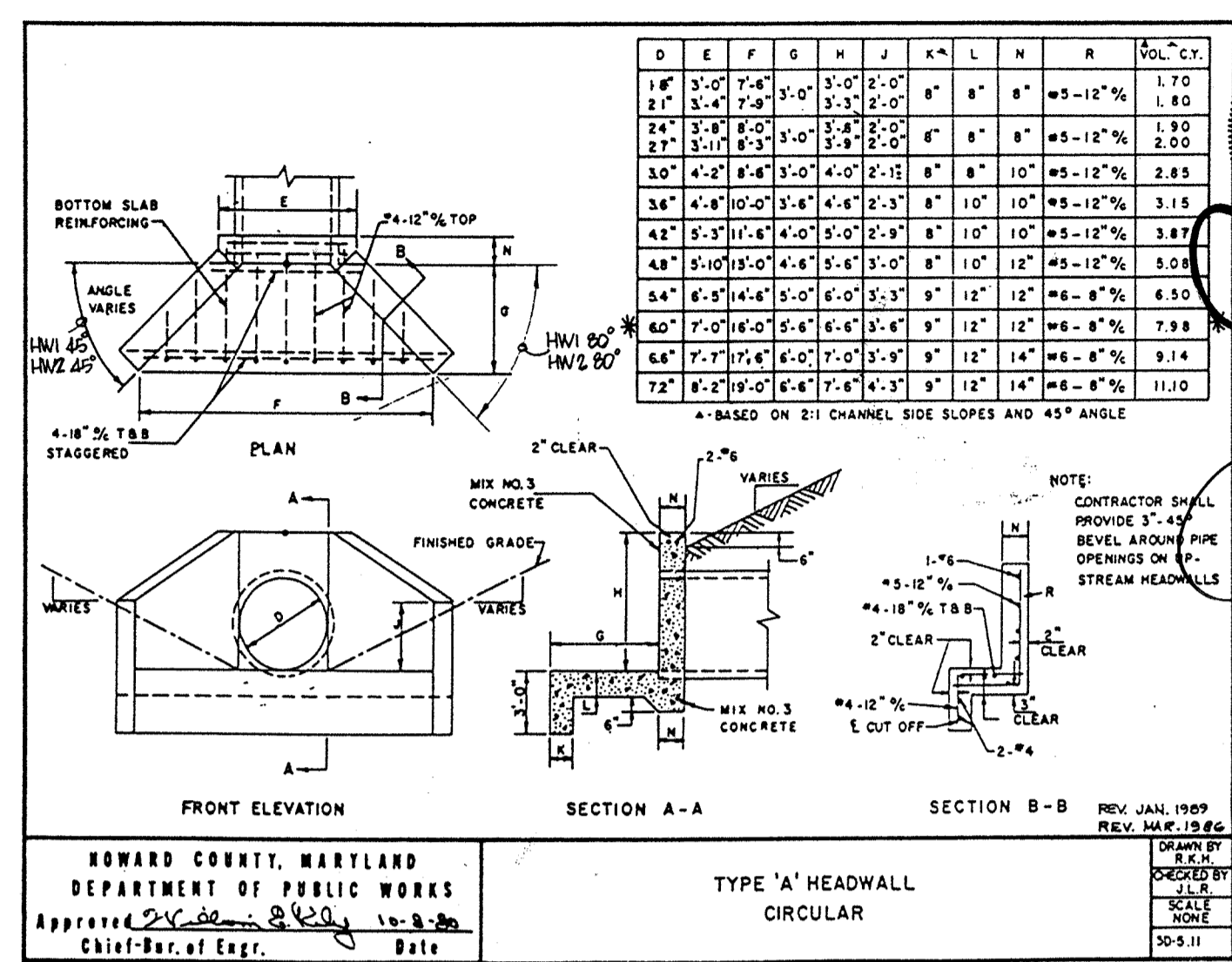
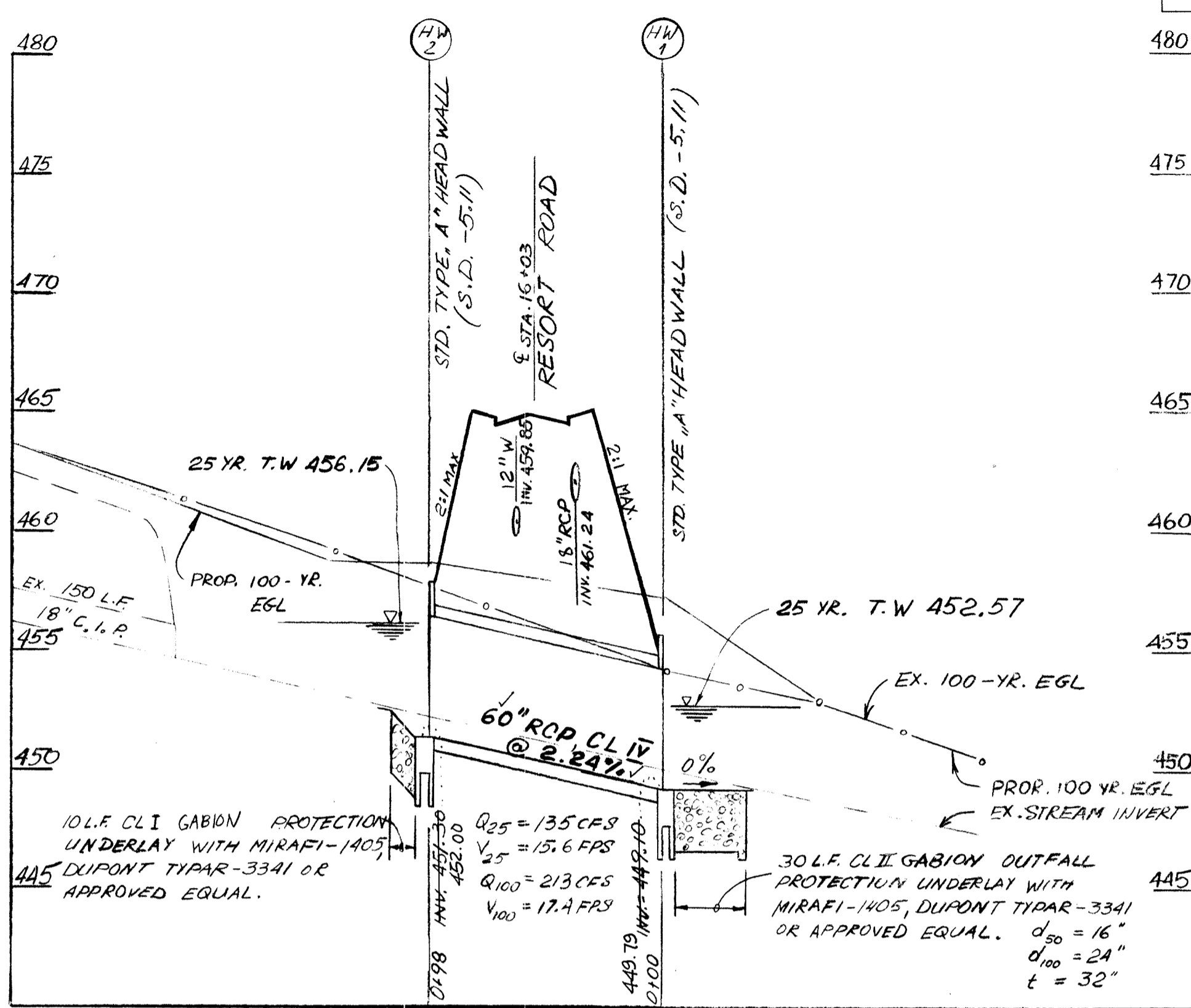
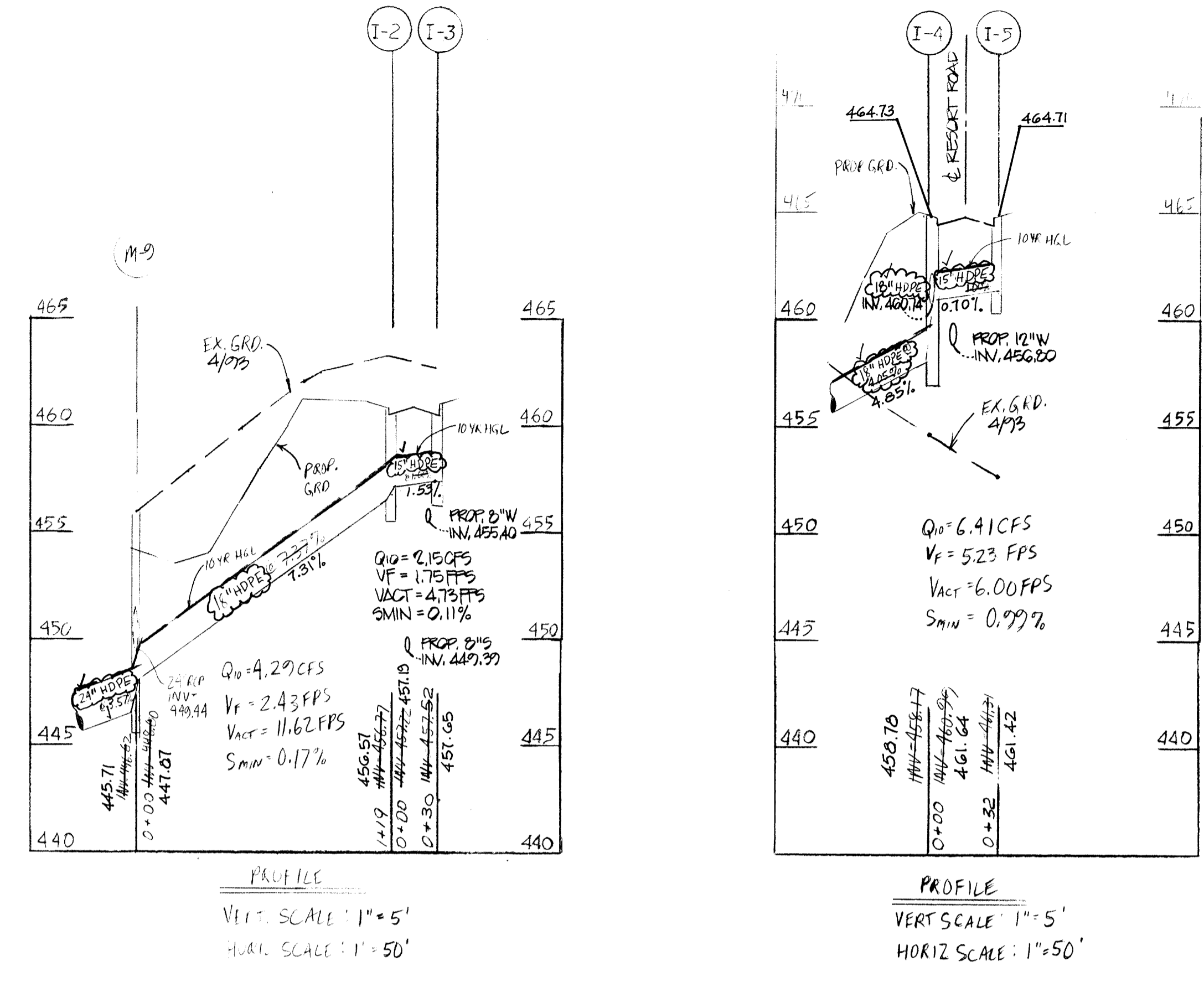
Project	95016.13	Date	4/23/96
Illustration	TUV	Engineering	PRB/MWZ
Scale	AS SHOWN	Approval	RAM

Revisions	date
1	5/17/96
2	5/16/96
3	5/16/96
4	5/16/96
5	5/16/96
6	5/16/96
7	5/16/96
8	5/16/96
9	5/16/96
10	5/16/96

PHASE 1
TURF VALLEY FODS "D" & "E"
ELECTION DISTRICT No. 2
HOWARD COUNTY, MARYLAND
STORM DRAIN PROFILES

EM MOCHI GROUP, INC.
1300 N. Ridge Road, Suite 235
Ellicott City, MD 21040-3350
(410) 461-0079
Fax: (410) 750-5340

NOTE: OTHER STORM DRAIN PIPE MATERIALS MAY BE SUBSTITUTED FOR CONCRETE PIPE PROVIDED SUFFICIENT SPECIFICATIONS AND DOCUMENTATION IS PROVIDED TO THE DEVELOPMENT ENGINEERING DIVISION OF HOWARD COUNTY FOR APPROVAL.



NOTE: THE PROPOSED HDPE PIPE MUST MEET M-294 REQUIREMENTS.

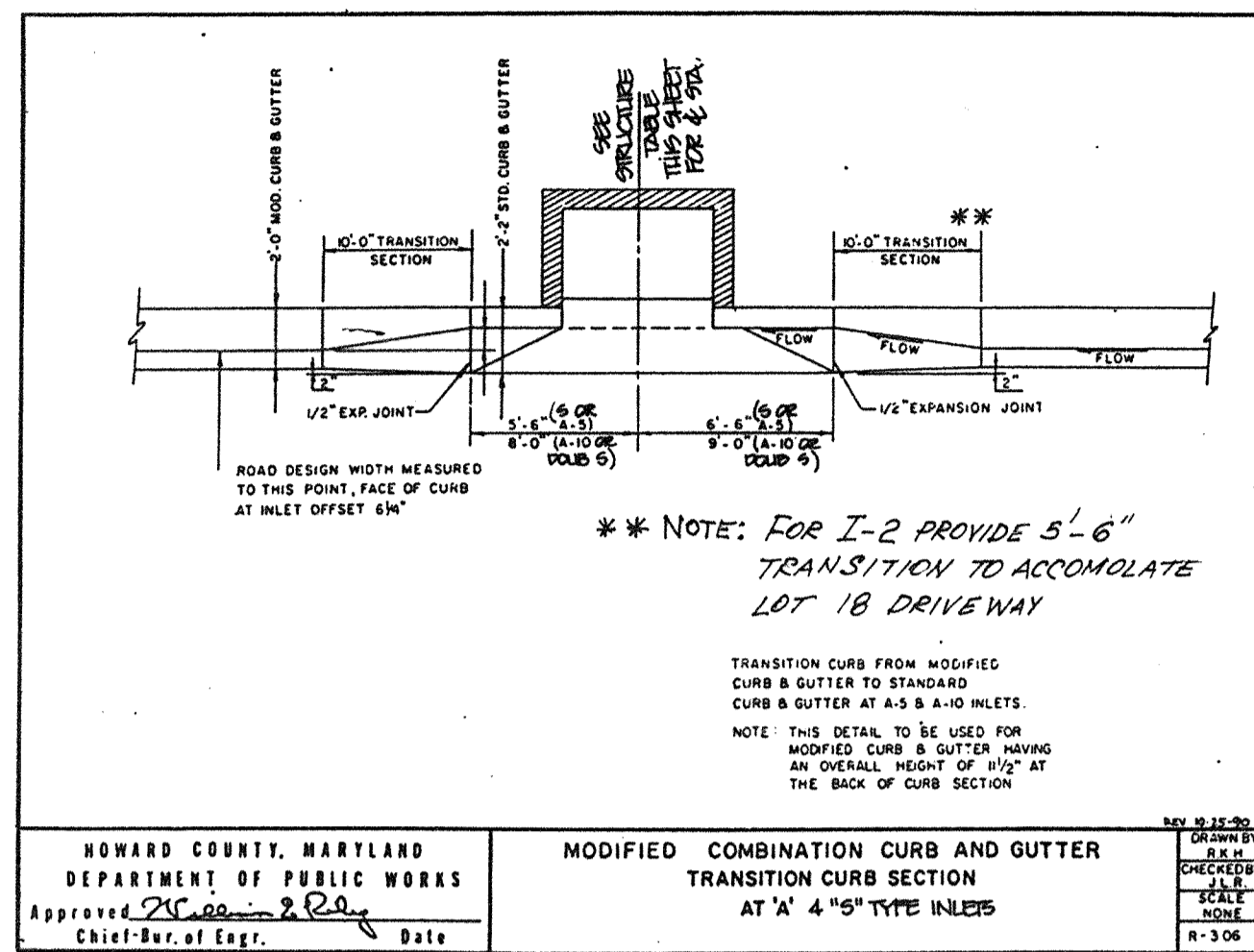
PA. FILE
VERT. SCALE: 1"=5'
HORIZ. SCALE: 1"=50'

265

STRUCTURE SCHEDULE

No.	TYPE	LOCATION	ELEVATION	REMARKS
I-1	"K"	N 533019.66 E 835612.67 (C.I.)	445.00 (THROAT) 444.13	STD. SD 4.12
I-2	5" COMBINATION UNDEPRESSED *	STA. 5+20 O/S 11' R	462.12 (TC) 461.00	STD. SD 4.32
I-3	5" COMBINATION UNDEPRESSED *	STA. 5+78.05 O/S 11'	461.00 (TC) 462.00	STD. SD 4.32
I-4	A-10	STA. 16+20.00 O/S 16' R	484.78 (TC) 484.60	STD. SD 4.02
I-5	A-10	STA. 16+20.00 O/S 16' L	484.78 (TC) 484.15	STD. SD 4.02
I-6	DOUBLE "S" COMB. UNDEPRESSED *	STA. 12+80.00 O/S 12' R	478.78 (TC) 478.10	STD. SD 4.34
I-7	DOUBLE "S" COMB. UNDEPRESSED *	STA. 12+80.00 O/S 12' L	478.78 (TC) 478.20	STD. SD 4.34
M-1	5" SHALLOW PRECAST MH	N 532361.31 E 835272.78 (C.I. MH)	414.80 (RIM) 415.35	STD. G 5.13
M-2	5" SHALLOW PRECAST MH	N 532326.74 E 835355.52 (C.I. MH)	420.40 (RIM) 420.47	STD. G 5.13
M-3	5" MH PRECAST	N 532906.39 E 835474.14 (C.I. MH)	437.20 (RIM) 437.45	STD. G 5.13
M-4	5" MH PRECAST	N 533146.41 E 835605.49 (C.I. MH)	446.70 (RIM) 447.15	STD. G 5.13
M-5	5" MH PRECAST	N 533213.71 E 835680.68 (C.I. MH)	449.80 (RIM)	STD. G 5.13
M-6	5" SHALLOW PRECAST MH	N 533255.47 E 835776.42 (C.I. MH)	446.20 (RIM)	STD. G 5.13
M-7	5" SHALLOW PRECAST MH	N 533275.21 E 835833.14 (C.I. MH)	443.70 (RIM)	STD. G 5.13
M-8	SHALLOW MH PRECAST	N 533351.85 E 835878.89 (C.I. MH)	448.40 (RIM)	STD. G 5.12
M-9	4" STANDARD PRECAST MH	N 533497.58 E 835941.74 (C.I. MH)	454.00 (RIM)	STD. G 5.12
M-10	4" STANDARD PRECAST MH	N 533707.44 E 836101.12 (C.I. MH)	462.20 (RIM)	STD. G 5.12
M-11	4" STANDARD PRECAST MH	N 533921.63 E 836184.08 (C.I. MH)	461.00 (RIM) 461.26	STD. G 5.12
M-12	SHALLOW MH PRECAST	N 533968.95 E 835897.75 (C.I. MH)	468.70 (RIM) 470.15	STD. G 5.12
HW-1	TYPE "A" HEADWALL CIRCULAR	STA. 15+77.67 O/S 48.82 R	455.60 (TOP OF WALL) 456.19	STD. SD 5.11
HW-2	TYPE "A" HEADWALL CIRCULAR	STA. 16+22.80 O/S 38.17 L	453.80 (TOP OF WALL) 454.53	STD. SD 5.11

NOTE: OTHER STORM DRAIN PIPE MATERIALS MAY BE SUBSTITUTED FOR CONCRETE PIPE PROVIDED SUFFICIENT SPECIFICATIONS AND DOCUMENTATION IS PROVIDED TO THE DEVELOPMENT ENGINEERING DIVISION OF HOWARD COUNTY FOR APPROVAL.



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[Signature]
CHIEF, BUREAU OF HIGHWAYS
DATE: 12-22-96

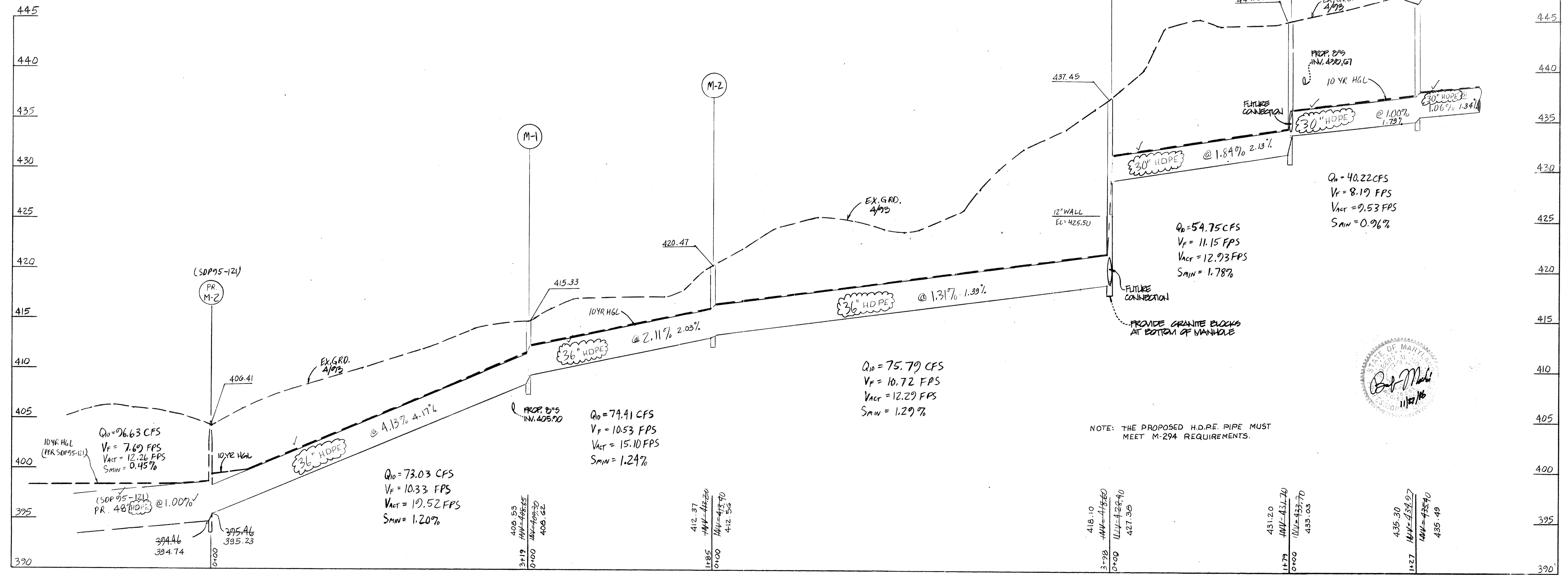
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

[Signature]
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 12/20/96

Project	95016.13	date	4/23/96
Illustration	TUV	engineering	95016.13
scale	AS SHOWN	approval	RAM

REVISED STRUCTURE SCHEDULE	5/17/99	DATE	5/17/99
CHANGE STORM DRAIN PIPE FROM RCP TO HDPE	3/16/98	DATE	3/16/98
SUBMITTED ORIGINAL TO DPZ FOR SIGNATURES	1/17/98	DATE	1/17/98
REMOVED SUPPLEMENTAL TO DPZ	1/16/98	DATE	1/16/98
REL SUBMITTAL TO HOWARD COUNTY DPZ	4/23/96	DATE	4/23/96

NOTE: ALL PRECAST MANHOLES MAY BE SUBSTITUTED WITH BRICK MANHOLE EQUIVALENTS AND VICE VERSA.
* BICYCLE SAFE GRATES REQUIRED



PROFILE
VERT SCALE: 1" = 5'
HORIZ SCALE: 1" = 50'

PHASE 1
TURF VALLEY PODS "D" & "P/O" "E"
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND
STORM DRAIN PROFILES

R.M. MOCHI GROUP, INC.
3300 N. Roper Road, Suite 235
Creston, MD 21768-3550
(410) 461-2079
Fax: (410) 758-5040

PERMANENT SEEDING NOTES

Apply to graded or cleared area not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding. (If not previously loosened)

- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sf) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sf) before seeding.
2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sf) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sf) before seeding.

Seeding: For the periods March 1 through April 30 and August 1 through October 15, seed with 80 lbs per acre (1.4 lbs/1000 sf) of Kentucky 31 Tall Fescue. For the period May 1 through July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (0.05 lbs/1000 sf) of Weeping Lovegrass.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sf) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 210 gallons per acre (5 gal/1000 sf) of emulsified asphalt on flat areas.

Maintenance: Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding. (If not previously loosened)

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sf).

Seeding: For periods March 1 through April 30 and from August 15 through November 15, seed with 2-1/2 bushels per acre of annual ryegrass (3.2 lbs/1000 sf). For the period May 1 through August 14, seed with 3 lbs per acre of Weeping Lovegrass (0.07 lbs/1000 sf).

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sf) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 210 gallons per acre (5 gal/1000 sf) of emulsified asphalt on flat areas.

Refer to the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control for rate and methods not covered.

SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction.

2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control.

3. Following initial soil disturbances or redisturbances, permanent or temporary stabilization shall be completed within: a) 72 hours for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1; b) 5 calendar days to all other disturbed or graded areas on the project site.

4. All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control for Permanent Seeding (Sec. G-III) Sod (Sec. G-IV), Temporary Seeding (Sec. G-II) and Mulching (Sec. G-I).

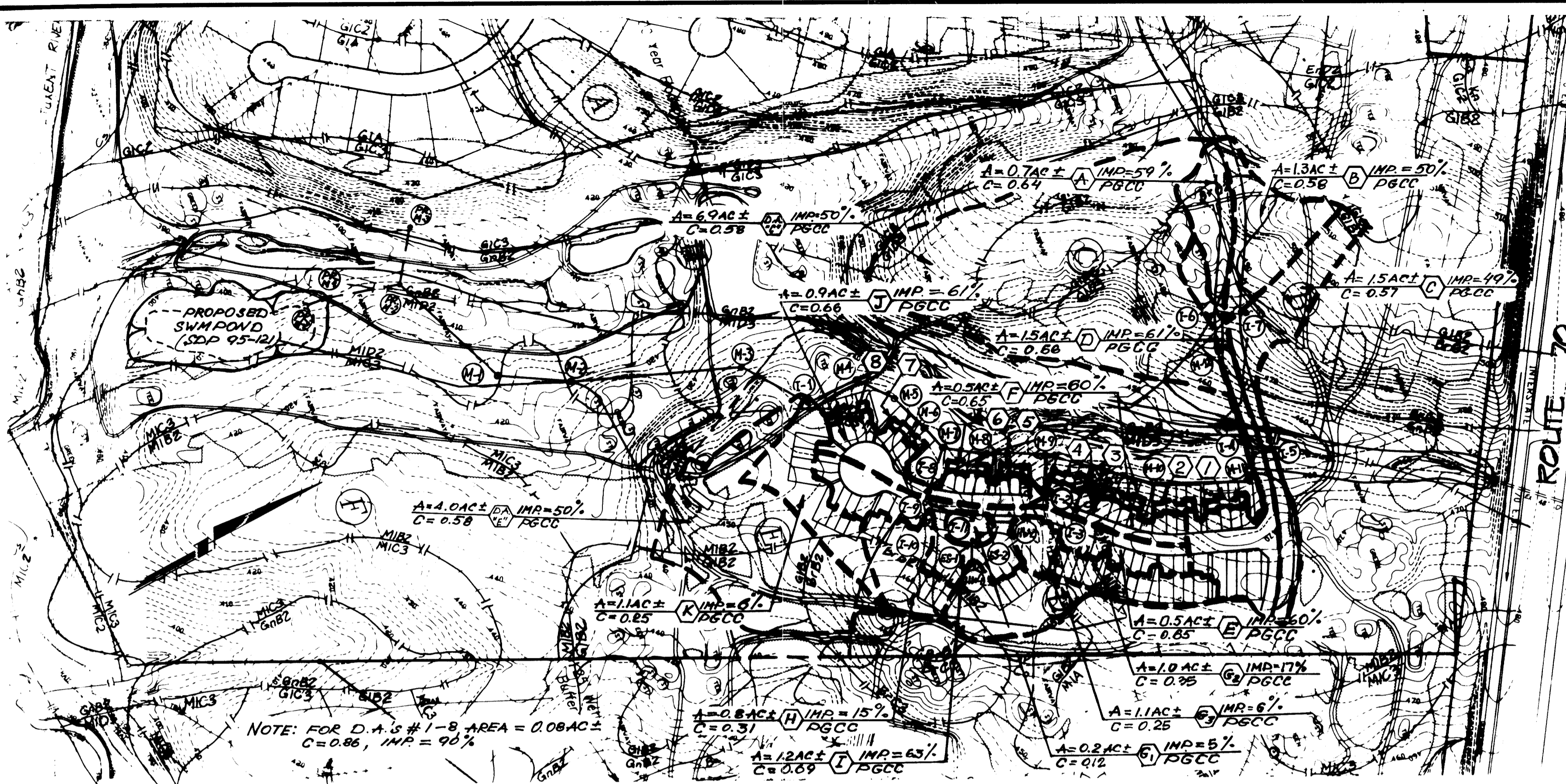
5. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.

6. Site Analysis: Phase I. Total Area of Site: 10.0 AC. Area to be Disturbed: 1.4 AC. Area to be roofed or paved: 0.0 AC. Area to be vegetatively stabilized: 14.600 AC. TOTAL CUT: 7900 CY.

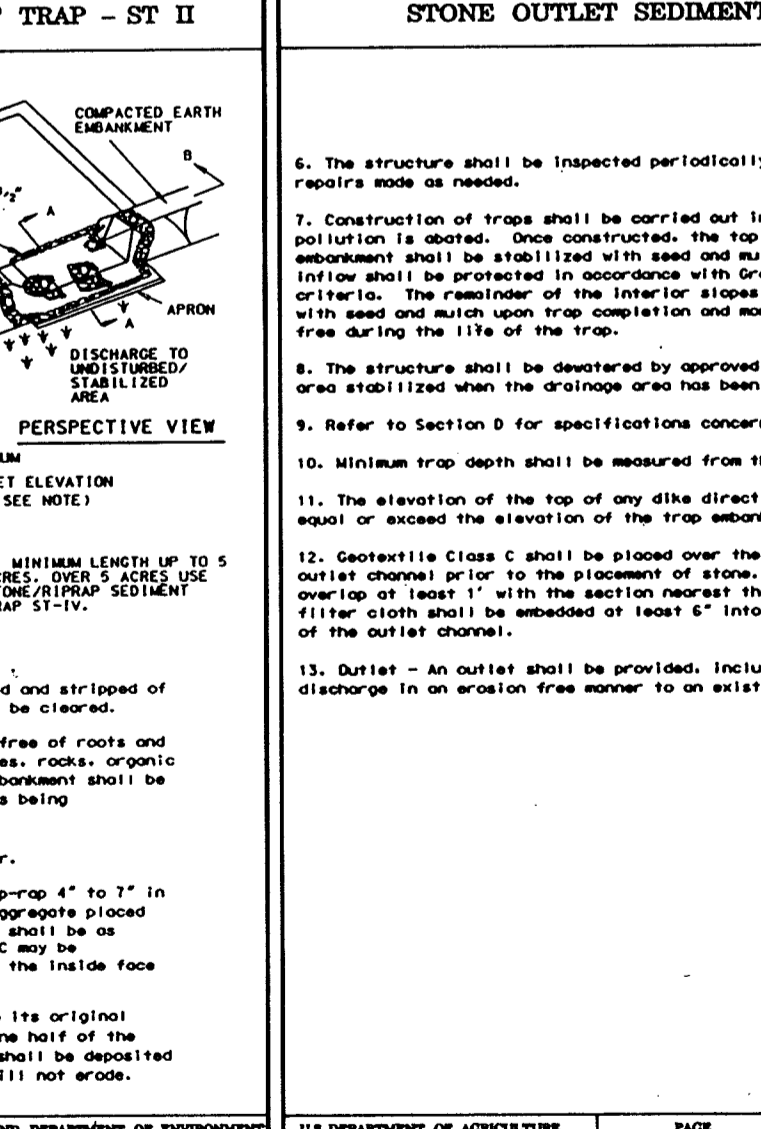
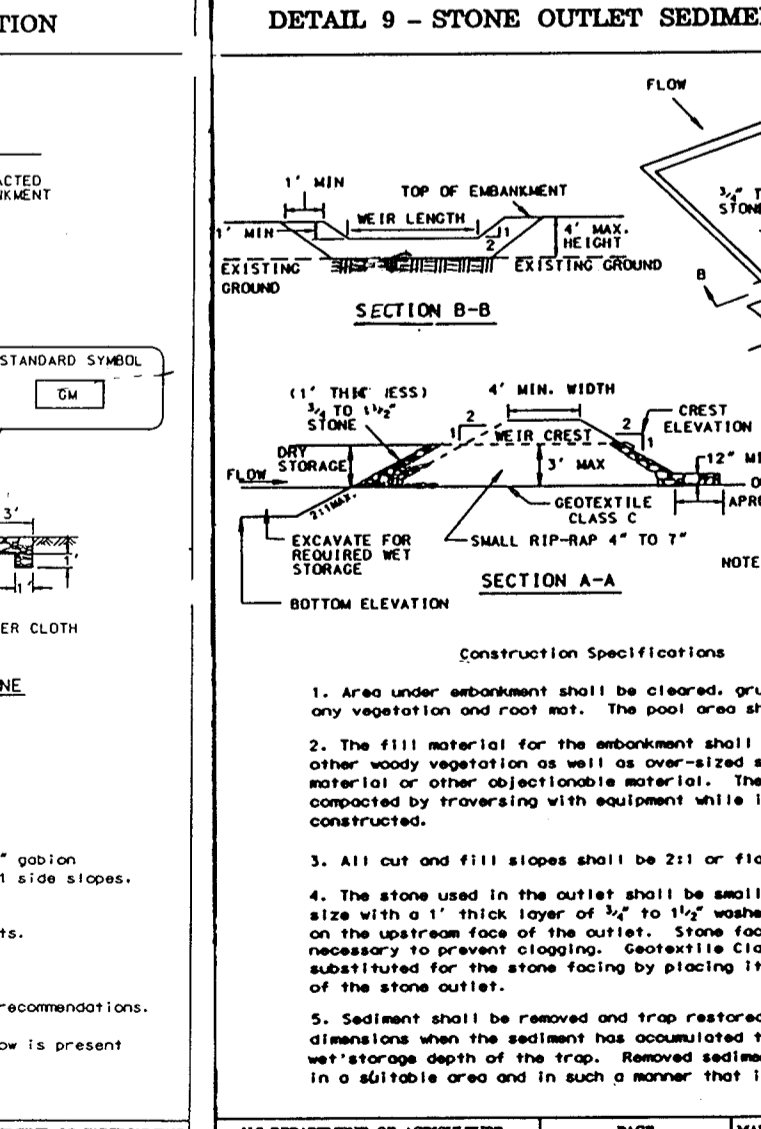
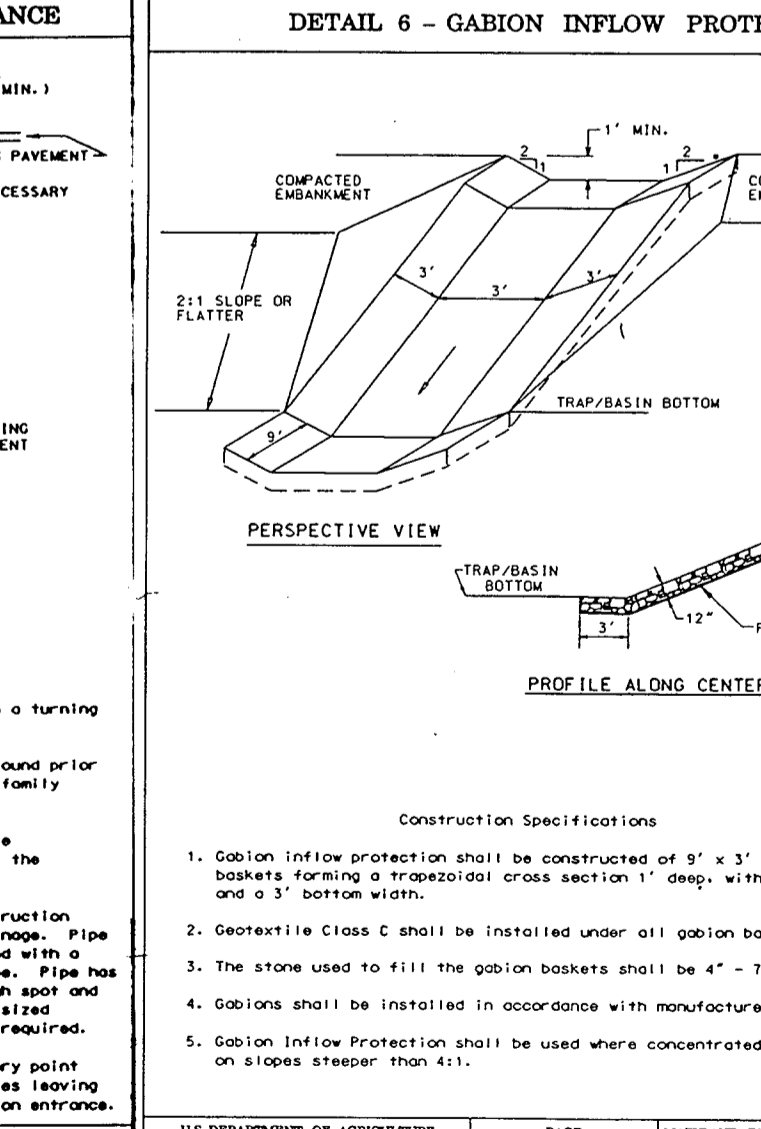
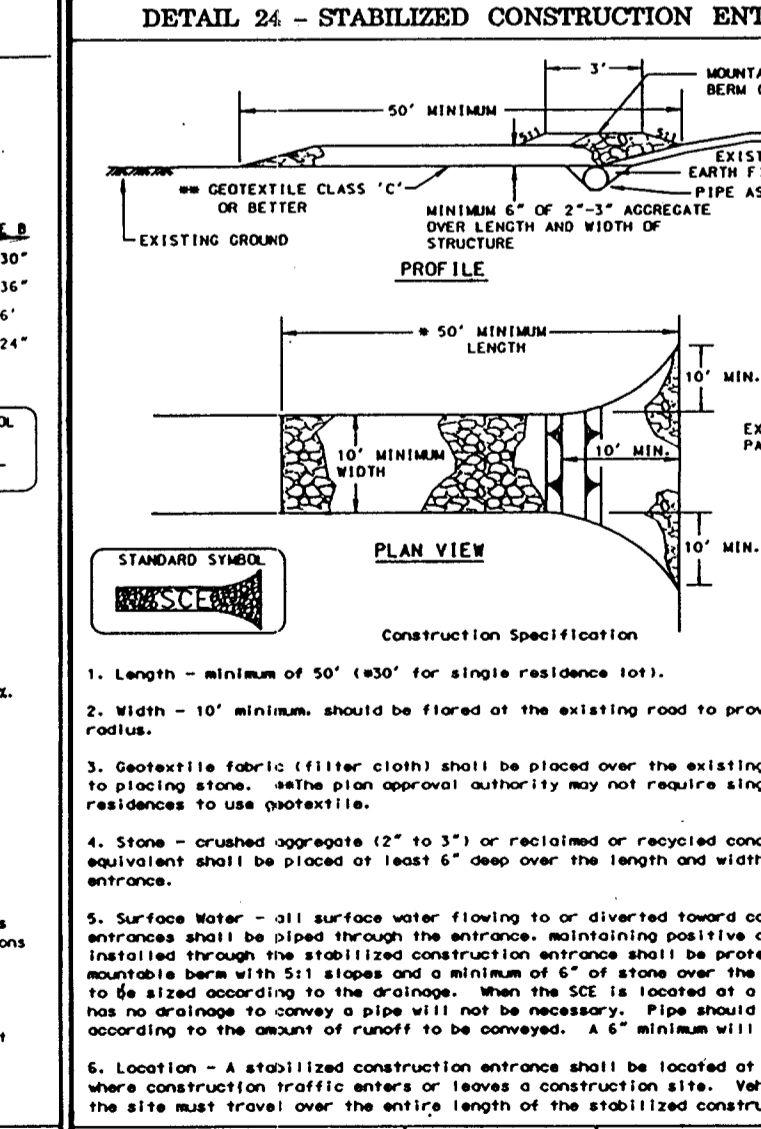
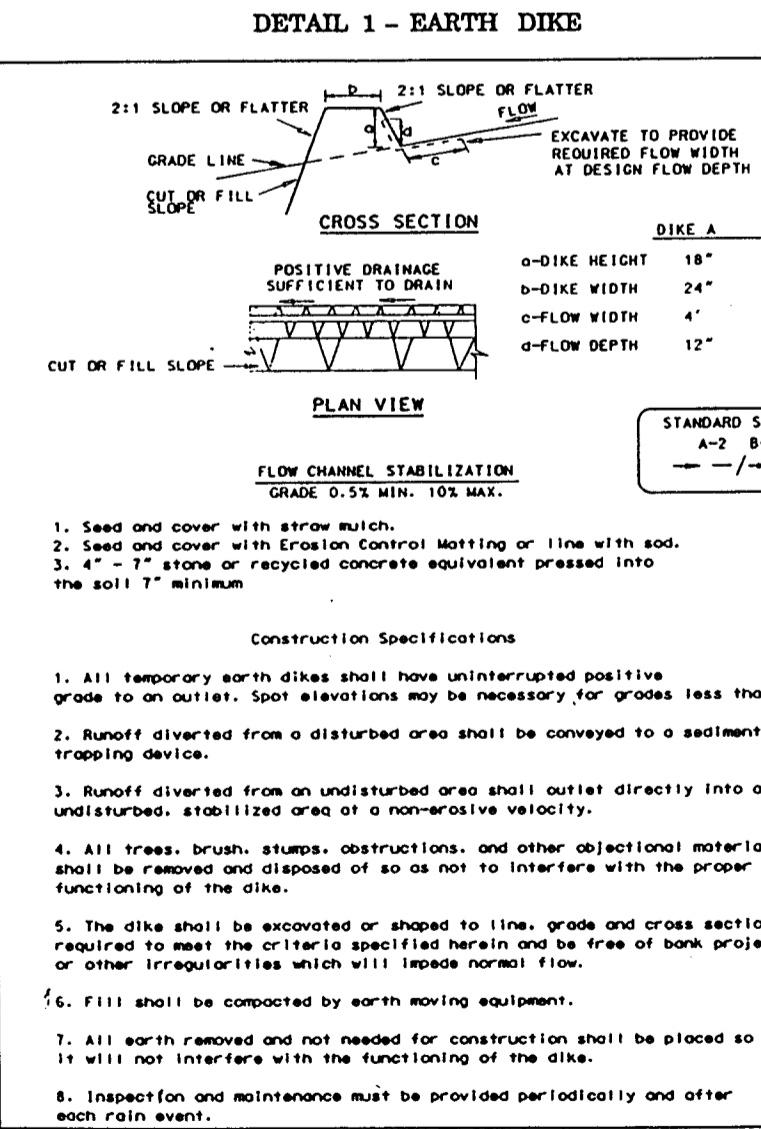
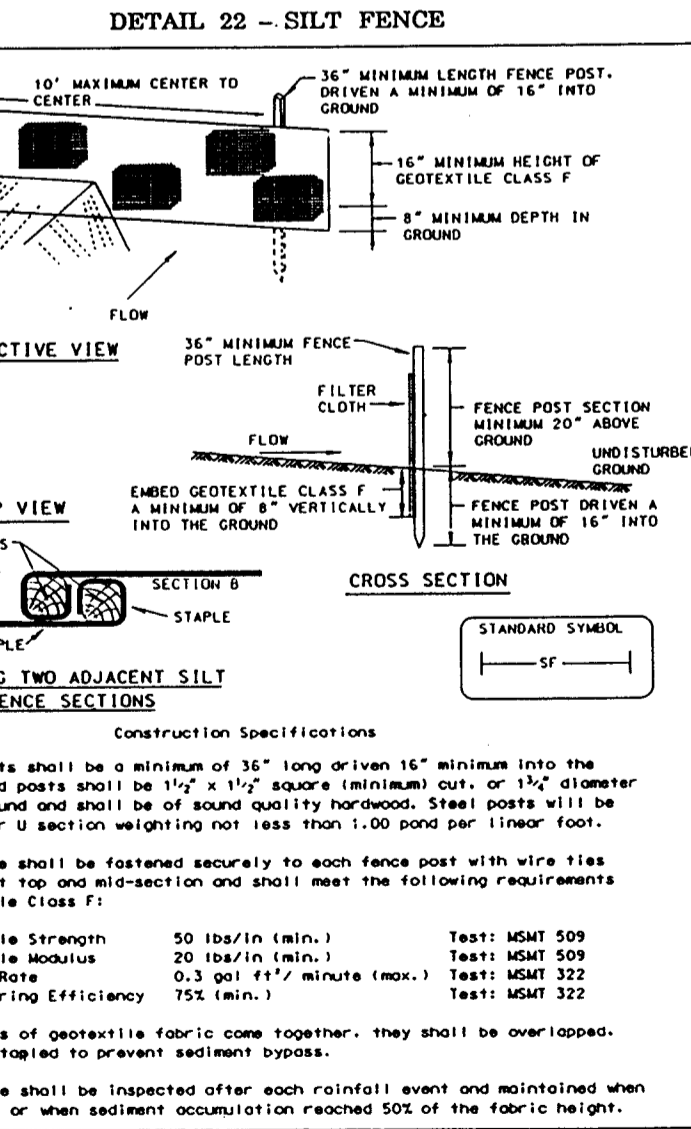
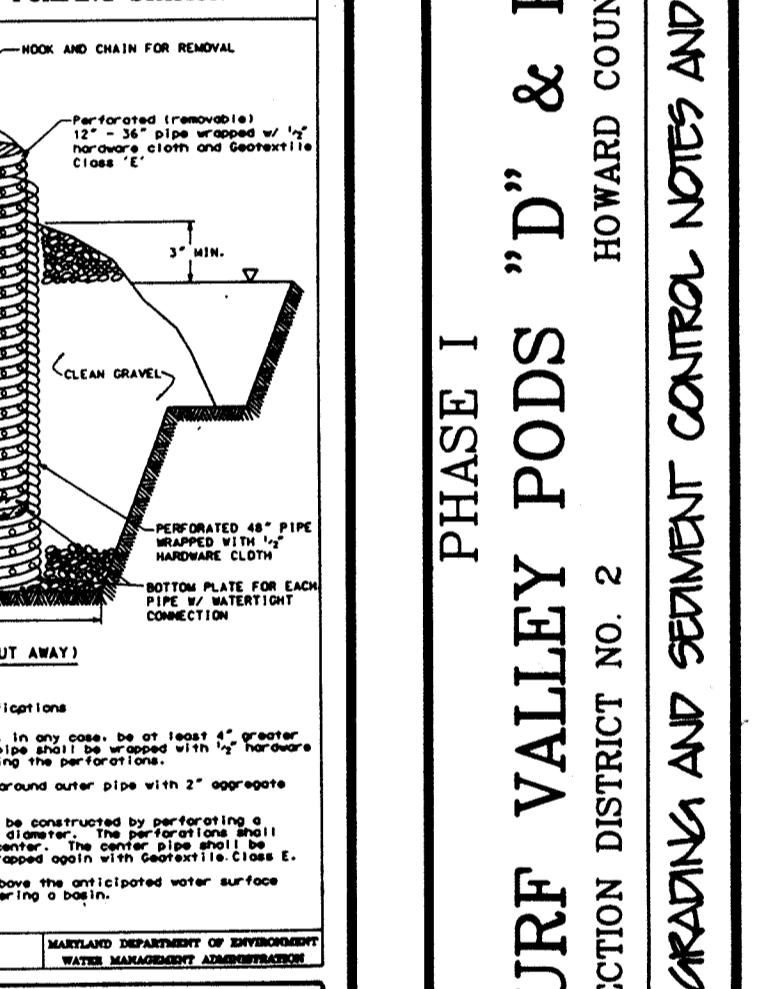
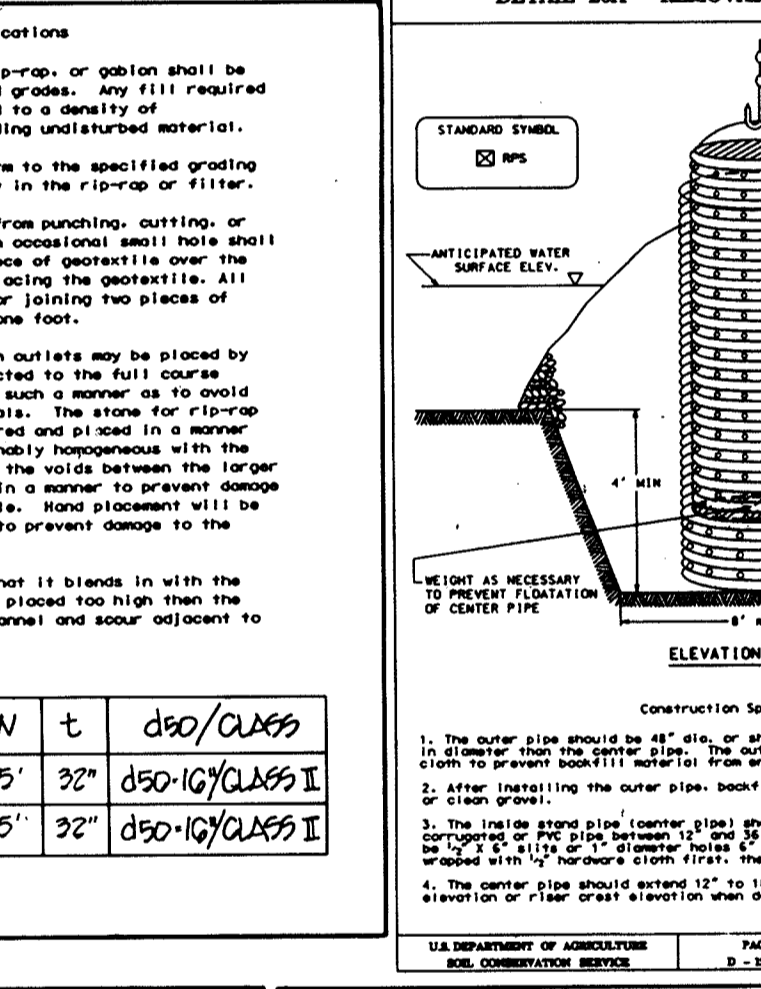
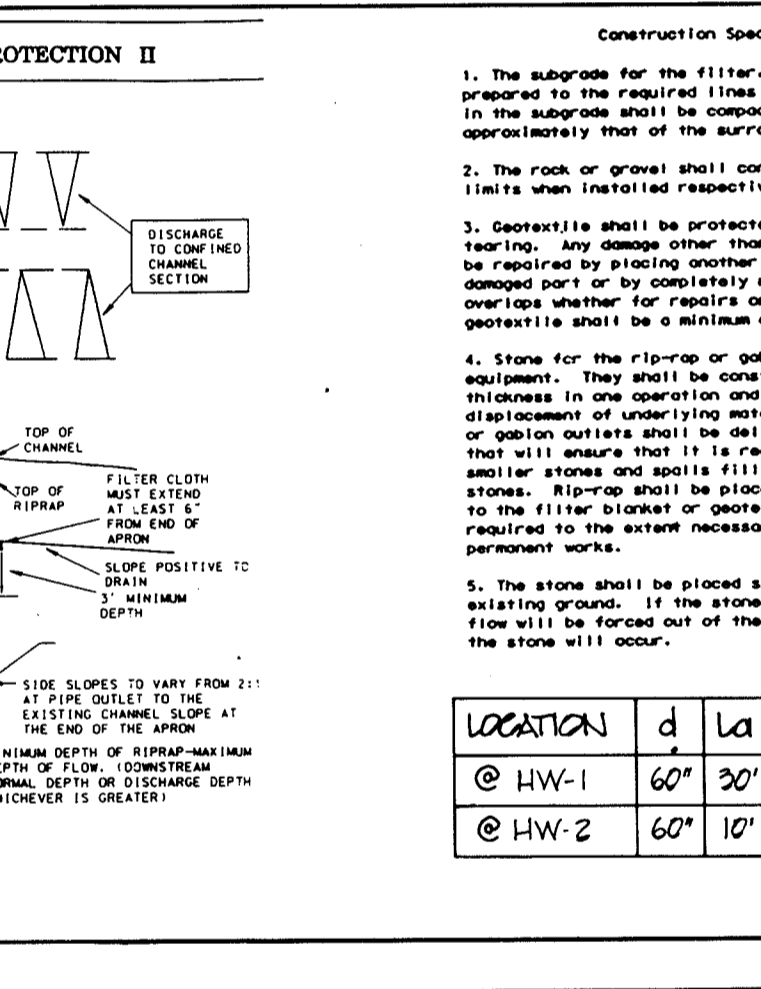
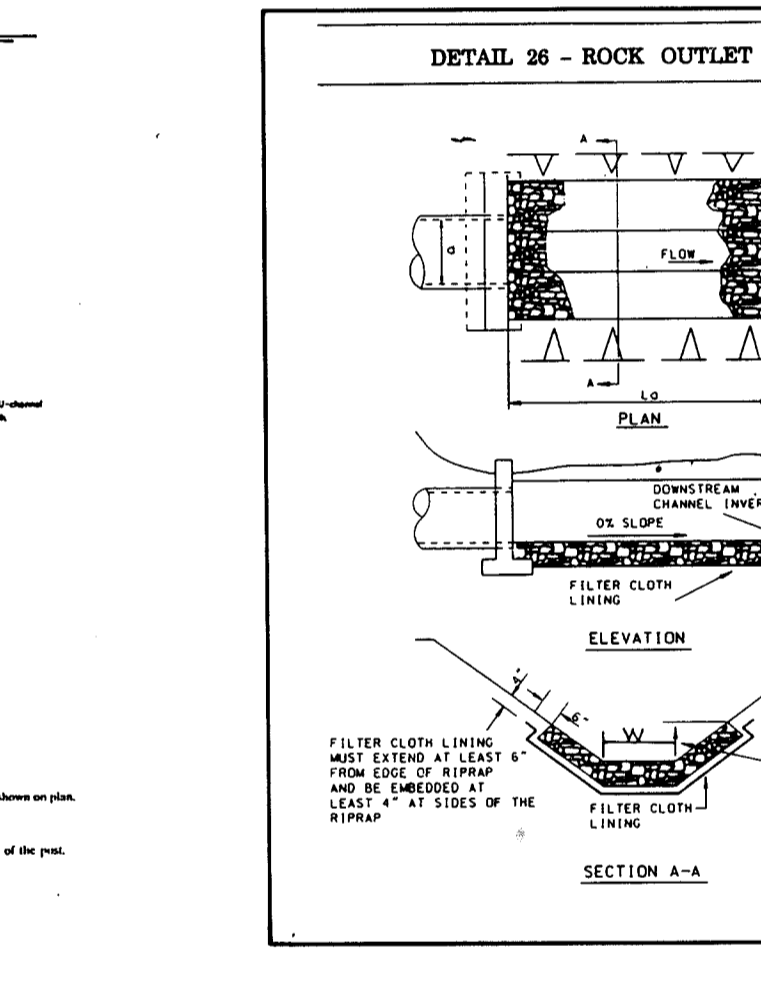
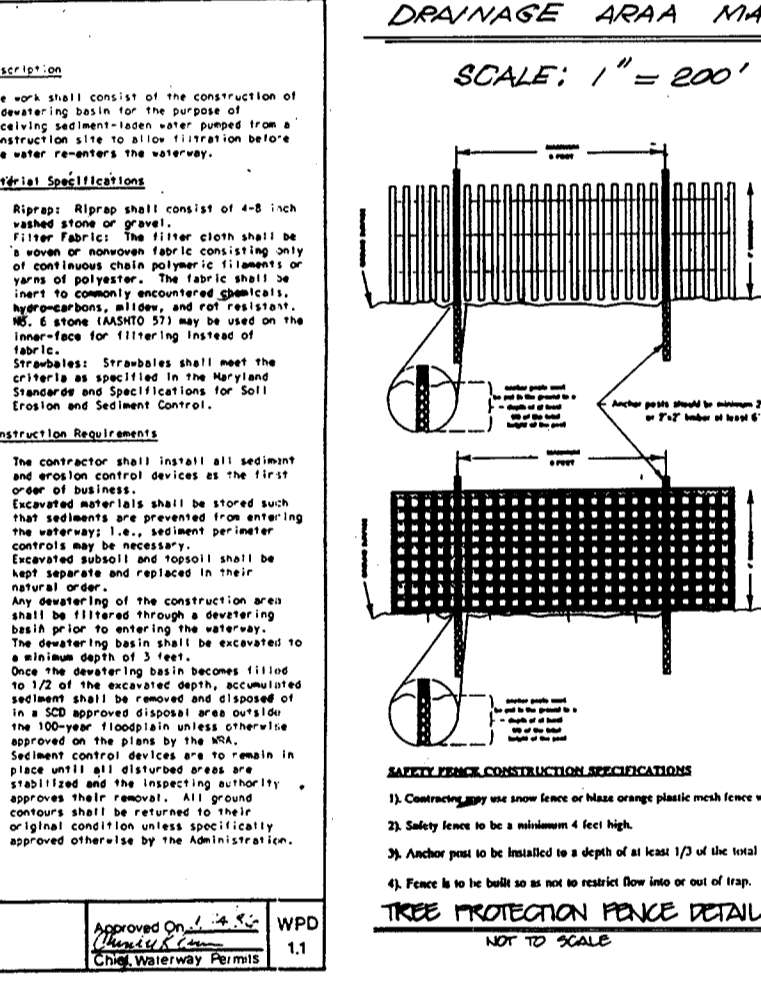
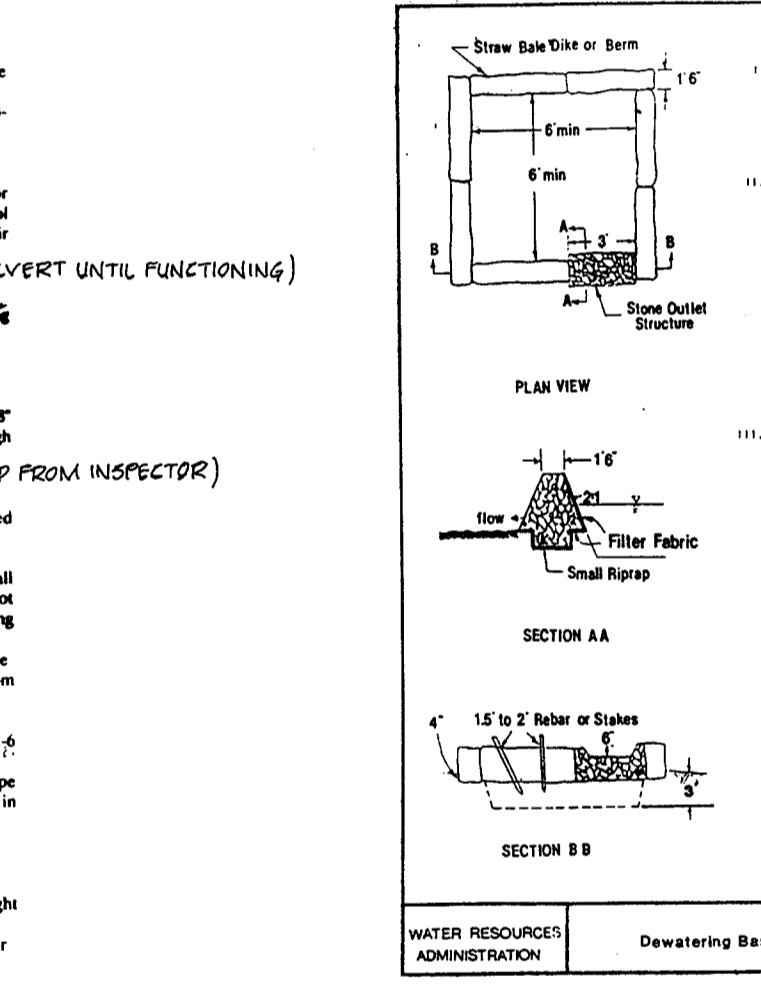
7. WASTE AREA: 268 PLAN SHEET 2 of 7. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.

8. Additional sediment controls must be provided, if deemed necessary by the Howard County DEP Sediment Control Inspector. Quantities and estimates shown are for sediment control purposes only. Contractor shall prepare his/her own quantity estimates to his/her satisfaction.

* ALL EXCESS MATERIAL SHALL BE TRANSPORTED TO A SUITABLE SMALL SITE WITH APPROPRIATE SEDIMENT CONTROL MEASURES AS REQUIRED.



Sequence of Construction (Phase) table with 13 rows detailing construction tasks from permit acquisition to final inspection.



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING. Signature: [Name], Date: 12/24/96.

APPROVED: THIS DOCUMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT. Signature: [Name], Date: 12/31/96.

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS. Signature: [Name], Date: 11/21/96.

DEVELOPER'S CERTIFICATE. I/We certify that all development and construction will be done accordance with this plan of development and plan for erosion and sediment control...

ENGINEER'S CERTIFICATE. I certify that this plan for erosion and sediment control represents a practical and workable plan based on a reasonable knowledge of the site conditions...

Project information block including date (4-24-96), project name (TURF VALLEY PODS 'D' & 'P' & 'O' 'E'), location (HOWARD COUNTY, MARYLAND), and contact information for R.M. MOCHI GROUP, P.C.

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